# Recombinant ARRD4 protein (His tag)

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| **Catalog Number** | 540783 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q8NCT1 |
| **Molecular Weight** | Predictes a molecular mass of 39.98 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 40 kDa band. |

## Product Information

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| **Sequence Region** | 1-355 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >89%, by SDS-PAGE with Coomassie Brilliant Blue staining. |
| **Endotoxin** | Not tested. |
| **Activity** | Not tested. |
| **Stability** | Samples are stable for up to twelve months from date of receipt at -70℃ |
| **Protein Construction** | DNA encoding 1-355 aa (Q8NCT1) were fused with 6His tag. |

## Storage & Handling

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| **Reconstitution** | Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. |
| **Storage** | Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. |
| **Shipping** | In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Recombinant Human Arrestin domain-containing protein 4 (ARRDC4) fragment (aa 1-355) is a high-quality protein preparation ideal for studying GPCR regulation, endocytosis mechanisms, and innate immune signaling. This stable, soluble fragment retains key functional properties while offering superior experimental handling for structural and biochemical applications.<br>Arrestin domain-containing protein 4 (ARRDC4) functions as an adapter protein that recruits ubiquitin-protein ligases to specific substrates and plays a crucial role in the endocytosis of activated G protein-coupled receptors (GPCRs). Through ubiquitination-dependent mechanisms, it facilitates the incorporation of SLC11A2 into extracellular vesicles and may contribute to glucose uptake regulation. Additionally, ARRDC4 participates in innate immune responses by promoting IFIH1/MDA5 activation through interaction with TRIM65. The protein localizes to early endosomes, the cell membrane (as a peripheral membrane protein on the cytoplasmic side), and cytoplasmic vesicles, and is also found in extracellular vesicles distinct from exosomes, highlighting its diverse cellular roles in membrane trafficking and signaling pathways. |